

CLAIMS

Please cancel claims 1-11 and 20-30.

Please add the following new claims 31-51:

31. (New) A method of reducing gastric motility in a subject comprising administering to said subject a therapeutically effective amount of an exendin or an exendin agonist.
32. (New) A method of delaying gastric emptying in a subject comprising administering to said subject a therapeutically effective amount of an exendin or an exendin agonist.
33. (New) A method of reducing gastric motility in a subject comprising administering to said subject an amount of an exendin or an exendin agonist effective for reducing gastric motility.
34. (New) A method of delaying gastric emptying in a subject comprising administering to said subject an amount of an exendin or an exendin agonist effective for delaying gastric emptying.
35. (New) The method according to claim 31, 32, 33 or 34 wherein said exendin is exendin 3.
36. (New) The method according to claim 31, 32, 33 or 34 wherein said exendin is exendin-4.
37. (New) The method according to claim 31, 32, 33 or 34 wherein said subject is undergoing a gastrointestinal diagnostic procedure.
38. (New) The method according to claim 37 wherein said gastrointestinal diagnostic procedure is a radiological examination.
39. (New) The method according to claim 38 wherein said gastrointestinal diagnostic procedure is magnetic resonance imaging.
40. (New) A method according to claim 31 or 33 wherein said gastric motility is associated with a gastrointestinal disorder.
41. (New) The method according to claim 31, 32, 33 or 34 wherein said exendin agonist is selected from a peptide compound of the formula [SEQ. ID. NO. 38]:

1 5 10
Xaa₁ Xaa₂ Xaa₃ Gly Thr Xaa₄ Xaa₅ Xaa₆ Xaa₇ Xaa₈
 15 20
Ser Lys Gln Xaa₉ Glu Glu Glu Ala Val Arg Leu
 25 30
Xaa₁₀ Xaa₁₁ Xaa₁₂ Xaa₁₃ Leu Lys Asn Gly Gly Xaa₁₄
 35
Ser Ser Gly Ala Xaa₁₅ Xaa₁₆ Xaa₁₇ Xaa₁₈ -Z

wherein:

D2

Xaa₁ is His, Arg or Tyr;
Xaa₂ is Ser, Gly, Ala or Thr;
Xaa₃ is Asp or Glu;
Xaa₄ is Phe, Tyr or naphthylalanine;
Xaa₅ is Thr or Ser;
Xaa₆ is Ser or Thr;
Xaa₇ is Asp or Glu;
Xaa₈ is Leu, Ile, Val, pentylglycine or Met;
Xaa₉ is Leu, Ile, pentylglycine, Val or Met;
Xaa₁₀ is Phe, Tyr or naphthylalanine;
Xaa₁₁ is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met;
Xaa₁₂ is Glu or Asp;
Xaa₁₃ is Trp, Phe, Tyr, or naphthylalanine;
Xaa₁₄, Xaa₁₅, Xaa₁₆ and Xaa₁₇ are independently Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine;
Xaa₁₈ is Ser, Thr or Tyr; and
Z is -OH or -NH₂;

with the proviso that the compound does not have the formula of either exendin-3 [SEQ. ID. NO. 1] or exendin-4 [SEQ. ID. NO. 2] and pharmaceutically acceptable salts thereof.

42. (New) The method according to claim 31, 32, 33 or 34 wherein said exendin agonist is selected from a peptide compound of the formula [SEQ. ID. NO. 39]:

1 5 10
Xaa₁ Xaa₂ Xaa₃ Gly Thr Xaa₄ Xaa₅ Xaa₆ Xaa₇ Xaa₈
 15 20
Ser Lys Gln Xaa₉ Glu Glu Glu Ala Val Arg Leu
 25 30
Xaa₁₀ Xaa₁₁ Xaa₁₂ Xaa₁₃ Leu Lys Asn Gly Gly Xaa₁₄
 35
Ser Ser Gly Ala Xaa₁₅ Xaa₁₆ Xaa₁₇ Xaa₁₈ -Z

D-2
wherein:

Xaa₁ is His or Arg;
Xaa₂ is Ser or Gly;
Xaa₃ is Asp or Glu;
Xaa₄ is Phe or naphthylalanine;
Xaa₅ is Thr or Ser;
Xaa₆ is Ser or Thr;
Xaa₇ is Asp or Glu;
Xaa₈ is Leu or pentylglycine
Xaa₉ is Leu or pentylglycine;
Xaa₁₀ is Phe or naphthylalanine;
Xaa₁₁ is Ile, Val or tert-butylglycine;
Xaa₁₂ is Glu or Asp;
Xaa₁₃ is Trp or Phe;
Xaa₁₄, Xaa₁₅, Xaa₁₆ and Xaa₁₇ are independently selected from Pro, homoproline, thioproline or N-methylalanine;
Xaa₁₈ is Ser or Tyr; and
Z is -OH or -NH₂;

with the proviso that the compound does not have the formula of either exendin-3 [SEQ. ID.

NO. 1] or exendin-4 [SEQ. ID. NO. 2] and pharmaceutically acceptable salts thereof.

43. (New) The method of any of claims 31, 32, 33 or 34, wherein said exendin agonist is an exendin analog or derivative.

44. (New) The method of claim 43, wherein said exendin analog or derivative has an activity about 1% to about 10,000% of the activity of the exendin of which it is an analog or derivative.

45. (New) The method of claim 43, wherein said exendin analog or derivative has an activity about 10% to about 1,000% of the activity of the exendin of which it is an analog or derivative.

46. (New) The method of claim 43, wherein said exendin analog or derivative has an activity about 50% to about 500% of the activity of the exendin of which it is an analog or derivative.

47. (New) The method of claim 43, wherein said exendin analog or derivative has at least about 50% amino acid sequence similarity to the exendin of which it is an analog or derivative.

48. (New) The method of claim 43, wherein said exendin analog or derivative has at least about 70% amino acid sequence similarity to the exendin of which it is an analog or derivative.

49. (New) The method of claim 43, wherein said exendin analog or derivative has at least about 90% amino acid sequence similarity to the exendin of which it is an analog or derivative.

50. (New) The method of claim 43, wherein said exendin analog or derivative has at least about 95% amino acid sequence similarity to the exendin of which it is an analog or derivative.

51. (New) The method of claim 43, wherein said exendin analog or derivative is an analog or derivative of exendin-4.